

# CprE 491 Weekly Report - Week 9

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**Dates:** 10/27/15 - 11/2/15

**Group:** May1617

**Advisors:** Dr. Zambreno / Dr. Jones

**Client:** Matt Dresser (Vermeer Corporation)

**Members:** Brian Gillenwater, Nate Kent, Quinn Murphy, Bryce Poellet, Jon Schlueter

**Project Title:** Quadrotor Environment Mapping

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## Weekly Summary

- Flew the drone
- Generated Photogrammetry results

## Meeting Notes

### Wednesday 10/28/15 10:00am - Drone Flying (Brian, Jon, Quinn)

- Attempted to fly the drone
- Scoped the area
- It was too windy

### Friday 10/30/15 4:00pm - Drone Flying (Brian, Jon, Quinn)

- Captured two areas with different altitudes
  - 50 feet
  - 200 feet
- Used the "Weedwacker" approach

### Monday 11/1/15 10:00am - Team Meeting (Quinn, Nate, Brian, Bryce, Jon)

- Reviewing drone flight footage
- Discussion of improvements to "Weedwacker" algorithm
- Time To Render
  - ~4 hours
- Beginning Flight path generation

## Pending Issues

- Need to be automating capture of photos, manual takes too long due to android app

## Plans for Next Week

- Photogrammetry pipeline

- Nate
- Import into Game Engine
  - Jon
- Windows/Algorithm Development
  - Brian, Bryce
- Android Development
  - Quinn
- Diagrams for Flight Plans
  - Quinn

## Individual Contributions

- Brian Gillenwater
  - Drone Flight
- Nate Kent
  - Investigated the use of VisualSFM and the photogrammetry pipeline
  - Worked on the design document
- Quinn Murphy
  - Drone Flight
- Bryce Poellet
  - Got windows app building locally
- Jon Schlueter
  - Drone Flight
  - Created a couple photo batches to test photogrammetry

Name	Hours this Week	Cumulative Hours	Role
Brian Gillenwater	4.0	17.0	Webmaster
Nate Kent	3.5	17.0	Productivity Officer
Quinn Murphy	4.0	17.0	Leader
Bryce Poellet	1.5	15.0	Communications
Jon Schlueter	4.0	19.0	Key Concepts